

head, its distance from the caudal equal to diameter of eye. Anal 70-73, nearly reaching the caudal. Pectoral $\frac{3}{3}$ to $\frac{2}{3}$ length of head, the spine smooth and about $\frac{2}{3}$ the length of the fin. Ventral once and $\frac{2}{3}$ to once and $\frac{3}{4}$ as distant from base of caudal and from end of snout. Caudal $\frac{2}{3}$ length of head. Dark brown above, whitish beneath.

Total length 225 mm.

One specimen from the Kribi River and one from the Lobi River.

Eleotris kribensis.

Body cylindrical or a little compressed, its depth 4 to 5 times in total length; length of head 3 to $3\frac{1}{3}$ times in total length. Head broader than deep, naked; snout broad, rounded, as long as or a little longer than the eye, the diameter of which is 4 to $4\frac{1}{2}$ times in length of head and equal to or a little less than interorbital width; lower jaw projecting; maxillary extending to below anterior third or centre of eye; no canine teeth; no præopercular spine. Dorsals VI, I 8-9, well separated from each other, longest rays not longer than head. Anal I 7, opposite to second dorsal. Pectoral $\frac{2}{3}$ to $\frac{3}{4}$ length of head, a little longer than ventral. Caudal rounded, a little shorter than head. Caudal peduncle once and $\frac{1}{2}$ to once and $\frac{2}{3}$ as long as deep. Scales smooth on the nape, strongly ciliated on the body, 32 to 35 in a longitudinal series, 12 between origin of dorsal and anal. Yellowish to brown, dotted with darker, with or without five or six ill-defined dark cross-bands; a blackish bar at the root of the caudal fin; fins brown or blackish and white-edged in males, whitish with blackish spots in females.

Total length 50 mm.

Numerous specimens from the Kribi River.

X.—*The Atractylis coccinea of T. S. Wright.*

By E. S. RUSSELL, M.A.

THIS hydroid was described by Wright (Ann. Nat. Hist. ser. 3, viii. (1861) p. 130) in the following words:—

“*Atractylis coccinea*, n. sp.

“Polypidom creeping, widely reticulate. Polyp fusiform, set at an obtuse angle to its stalk, rich crimson or pink, with eight alternating tentacles, four long and four short.”

No gonophores were found. Hincks ('Hydroid Zoophytes,' 1868) provisionally transferred the species to the genus *Perigonimus*. Allman does not mention it at all, and I have not been able to find any subsequent record of it.

In 1905 I obtained near Millport Marine Biological Station numerous specimens of what is almost certainly the *Atractylis coccinea* of Wright. They differ from Wright's specimens in having twelve equal tentacles, but they all have the hydranth set at an obtuse angle with the stalk, a very characteristic point.

The species was not figured by Wright, and his description was in some respects incomplete. I therefore give here a detailed description of my specimens and a figure.

The species must be assigned to the genus *Wrightia*, Allman (1872). The genus *Atractylis*, Wright (1859), contained forms which are now distributed among the genera *Bougainvillia*, *Perigonimus*, and *Wrightia*. Hincks's genus *Atractylis* is synonymous with Allman's *Wrightia*, but the name *Wrightia* is to be preferred, since *Atractylis* is the long-established name of a genus of plants. *Wrightia*, when constituted by Allman, contained one species, *Wrightia arenosa* (*Atractylis arenosa*, Alder, Suppl. Catalogue, p. 7, pl. x. figs. 5-7), and the diagnosis of the genus contained some of the *specific* characteristics of *Wrightia arenosa* (Alder), namely, the funnel-shaped stems, the retractile hydranth, and the position of the gonophores on the hydrocaulus. I propose the following definition of the genus, which is in all essentials the same as Allman's definition, but leaves out any reference to the purely specific characters of either of the two species which the genus contains, *arenosa* (Alder) and *coccinea* (Wright).

WRIGHTIA.

Atractylis (in part.), Wright, Edin. New Phil. Journ. ix. p. 106 (1859).

Atractylis, Hincks (1868).

Wrightia, Allman (1872).

Hydrocaulus erect, unbranched, arising from a creeping hydrorhiza. Perisarc expanding above to form a protective sheath which clothes the hydranth up to the base of the tentacles.

Reproduction by fixed sporosacs, which are partially or wholly invested by a chitinous envelope.

Wrightia coccinea (Wright).

Atractylis coccinea, Wright (1861).

Perigonimus (?) *coccineus*, Hincks (1868).

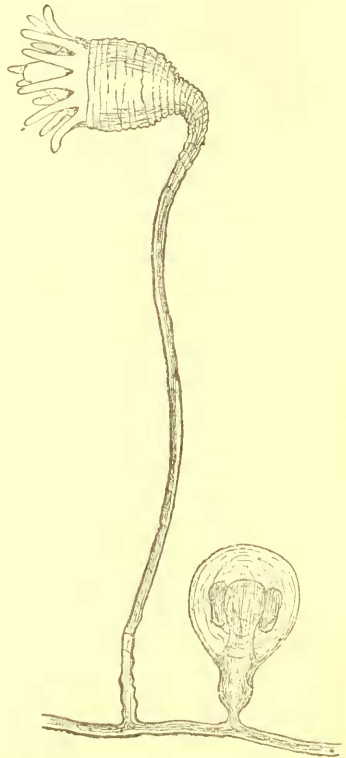
Trophosome.—The hydrocaulus consists of a number of short stems $\frac{1}{4}$ – $\frac{1}{2}$ inch in length (slender, somewhat contorted, unbranched, or with small offshoot bearing a hydranth), which arise at short intervals from a creeping and anastomosing hydrorhiza, which resembles the stems. The hydranth makes an obtuse angle with the stem. It is closely invested up to the roots of the tentacles by a hydrothecal expansion of the perisarc, but is not retractile into it. The tentacles are 10–12 in number, short and straight, disposed in a single verticil round the bluntly conical hypostome. The perisarc is straw-coloured, and is wrinkled transversely where it expands to cover the hydranth. The colour of the hydranth is pink, turning to white at the tip of the hypostome. The tentacles are translucent white; the cœnosarc pink to scarlet.

Gonosome.—The gonophores are sporosacs. They are globular and arise from the hydrorhiza, to which they are attached by a slender pedicel. They are invested by a chitinous covering which is continuous with the perisarc. There is a short blunt spadix, in the outer layer of which the gametes are matured.

The gonophore resembles in structure that of *Garveia nutans*, as figured by Allman ('Gymnoblasic Hydroids,' i. p. 44).

The colour of the gonophore is translucent white; the spadix is brick-red; the gametes pink.

Wrightia coccinea was taken by Wright at Inch Garvie, Firth of Forth, on the roots of *Laminaria saccharina*, and by the writer at Hunterston Perch, near Fairlie, Firth of Clyde, in 12 fath., on *Tubularia*, and in Castle Bay, Little Cumbrac, in 15–20 fath., also on *Tubularia*. It is common where it



Wrightia coccinea.

does occur. I obtained my specimens in May and June, and they bore numerous gonophores.

In studying *Wrightia* and the allied genera one cannot help noticing their resemblance to Calyptoblasts. The family Bougainvilliidæ, to which they belong, is practically alone among Gymnoblastea in possessing a single verticil of filiform tentacles surrounding a conical hypostome. All the Calyptoblasts have this conical hypostome and single verticil of filiform tentacles. Further, many of the genera of Bougainvilliidæ have quite a distinct protective cup for the hydranth, resembling greatly the hydrotheca of the Calyptoblast. Indeed, were it not for the fact that these genera are classified with the Gymnoblastea, their protective cups would receive the name of hydrothecæ.

These facts point to the conclusion that a close relationship exists between the family Bougainvilliidæ and the suborder Calyptoblastea. The Bougainvilliidæ, perhaps, form a transition-stage between the suborders Gymnoblastea and Calyptoblastea.

XI.—*On the Generic Position of Benson's Helix hyba and the Similarity of its Anatomy to that of Khasiella vidua, W. T. Blanchard.* By Lt.-Colonel H. H. GODWIN-AUSTEN, F.R.S. &c.

EVER since the discovery of this species about 1860 it has been impossible to locate it in any Indian genus without considerable doubt. It is apparently very rare. I have never come across it in the field, and I do not think it is to be found in many collections. I am informed by Mr. S. F. Harmer, of the University Museum of Zoology, Cambridge, that two specimens (Benson's types) are in the MacAndrew collection. Fortunately I have recently discovered two specimens among some other species preserved in spirit by Mr. W. Theobald, marked "Chamba," a small State in the N.W. Himalaya, S.E. of Kashmir Territory. The one from which the subjoined description was taken was in a very good state of preservation. All we knew with any certainty was that it belonged to the Zonitidæ, Mr. Theobald having noted the presence of the mucous gland at the extremity of the foot at the time of capture.

Mr. Benson described the shell in the *Ann. & Mag. Nat. Hist.* ser. 3, vol. vii. (Feb. 1861), in his usual excellent way, and goes on to say:—